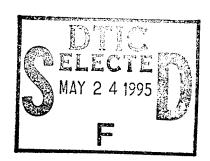
### NAVAL POSTGRADUATE SCHOOL

Monterey. California





### ARMY RESERVE PRIOR SERVICE MARKET PROFILE

Kathryn M. Kocher George Thomas

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April 1995

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Prepared for: HQ, DA, OCAR, Attn: DAAR-PAE, The Pentagon, Room 1D416, Washington, DC 203-2400

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## ARMY RESERVE PRIOR SERVICE MARKET PROFILE

By

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**April 1995** 

The opinions expressed are solely those of the authors

#### **ABSTRACT**

Only about 28 percent of the 177,023 enlisted losses to the Active Army in FY 1993 either transferred to the Reserve Components (RC) or had completed all of their obligated service and were eligible for reserve service (RE). Of these 48,000 RC and RE losses, 41,000 were in paygrades E4 and E5, the target pool for USAR Troop Program Unit (TPU) prior service recruiting. Only 28 percent of RC and RE E4-E5s had an occupation considered a priority for TPU readiness. A typical Active Army loss to the RC was a single white male E4 from the South census region with almost four years of service. He was a high school graduate in mental group category I-IIIA and had initially entered the Army for a four year term. A typical RE loss was a white male E5 with nine years of service. He was older and more likely to be married with dependents, but was similar in other respects to his RC counterpart. Neither was in a reserve priority occupation. Women made up less than 20 percent of both groups. Blacks were more strongly represented and Hispanics less strongly represented among RC and RE losses than among the comparable civilian population.

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#### CHAPTER I.

#### INTRODUCTION

#### A. BACKGROUND

The Army reserve plays an important role in the evolving force structure of the Armed Forces. The reserve contribution to the national defense was expanded with the inception of the Total Force Concept in the 1970s and grew as they participated in global missions and provided aid in domestic crises. Even as the active and reserve forces are resized to respond to new contingencies, the Reserve Components will continue to have a key function in meeting military goals.

If the Selected Reserve troop program units (TPUs) are to be ready for rapid mobilization and deployment, they must attract and retain high-quality personnel with the right skills. The population from which military recruits are usually drawn has been declining and, though it will begin to expand by the middle of this decade, growth will be very slow (U.S. Department of Commerce 1989). The pool of those qualified to fill highly technical military occupations is likely to be even more limited (U.S. Department of Labor 1990). Even as overall recruiting goals decline, it may become increasingly difficult to fill many high-priority Selected Reserve jobs.

Attracting reservists with prior active duty military service to fill Selected Reserve positions has many potential benefits for the Army Reserve. These individuals are familiar with military life and are trained and experienced in a military occupational specialty. They are less likely than nonprior service reserve recruits to attrite in their first few months of service (Thomas, et al 1986). If there is little lapsed time between separation from active service and

reserve accession, initial training costs will be saved and, if the reserve occupation is similar to the active duty specialty, the cost of advanced training will also be lower than the training costs for nonprior service entrants.

An enlistee entering active duty service incurs an eight year military service obligation (MSO). Some portion of that time is served on active duty and, on leaving active duty, the remainder in the Reserve Components. When an enlistee has completed his or her active duty term of enlistment (generally varying from two to six years), but still has remaining obligated service, he or she may reenlist on active duty, elect to transfer directly to a drilling National Guard or Selected Reserve unit, serve full time in support of reserve programs (Active Guard and Reserve), be pre-identified to meet active force wartime needs (Individual Mobilization Augmentee), or enter the Individual Ready Reserve (IRR). IRR members do not normally drill but may sometimes attend special training activities.

#### B. OBJECTIVES

Our goal in this report is to profile characteristics of the enlisted personnel separating from the Active Army who represent the primary pool of prior service manpower for the Army Reserve. The availability and quality of these transitioning active duty enlistees is of great importance as the Army Reserve investigates methods of utilizing this manpower pool to meet personnel readiness requirements.

The nature of the Selected Reserve TPU is such that reserve and active duty marketing and recruiting are done very differently. High school seniors are the target of the majority of the active duty recruiting effort. This market is easy to identify and access is direct. Prior service reserve marketing, in contrast, focusses on a population segment with a wider range of

ages, and without a common institutional affiliation. Lists of eligible personnel with accurate addresses are difficult to maintain as former active duty enlistees disperse in search of educational and employment opportunities. They may remain in the area of their last duty station, return to their home of record, or migrate to another geographic area.

The local geographic area surrounding the drilling site for an Army Reserve unit is the source of a unit's manpower. The economic and employment conditions in that area influence the attractiveness of TPU participation to former active duty personnel. Reserve TPU's differ greatly in type (engineering, medical, etc.) and in paygrade and occupational structure. If a TPUs characteristics and available jobs and paygrades do not match those of the prior service individuals in the local geographic area, this pool of potential recruits may remain an untapped resource. Or, recruiting may require military occupational specialty (MOS) retraining with its associated additional costs.

Even with a downsizing of the Reserve Components, filling TPUs with adequately trained personnel will not be a simple task. A smaller Active Army will be the source of a reduced pool of reserve available soldiers (Buddin and Kirin 1994). This report provides a picture of both the potential and the limitations of the prior (active duty) service market. The Army Reserve will be better able to establish appropriate recruiting and training policies for prior service individuals if this market's dimensions and skills composition are identified.

#### C. ORGANIZATION OF THE STUDY

Chapter 2 introduces the approach, research questions, and data utilized in the study.

Chapter 3 describes the destination of losses from the Active Army and the reasons for transition. Chapter 4 presents the personal and military experience characteristics of those prior

service individuals who enter the Reserve Components on transition or who are eligible to join. It includes a discussion of the skills of these transitioning personnel available for TPU membership. Chapter 5 contains summary profiles of Active Army losses who are available to the Army Reserve, as well as policy implications associated with the augmentation of the manpower pool for TPU accessions which these losses represent.

#### **CHAPTER 2**

#### DATA

This report is based on data from the Active Duty Master and Loss file maintained by the Defense Manpower Data Center (DMDC), Management Information and Analysis Division. Data elements are submitted to DMDC by Department of Defense components for all individuals separating from active duty or reenlisting and are stored on a quarterly basis for the current fiscal year (Department of Defense 1992a).

In recent years, the fiscal year loss file has contained about 500,000 records. Personal information includes identifying characteristics (name, SSN), sex, date of birth, education level, aptitude test scores, branch of service, race/ethnic-group, family status, home state, and information on military spouses. Military information includes length of service, military occupation, pay grade, date of separation, date of entry, date of reenlistment, date of last promotion, time in separation paygrade, reenlistment eligibility, reason for separation, and location at separation.

It is important to note that individuals exiting other active duty services or from any of the Reserve Components are not included in the profiles in this report. While these excluded groups are also potential sources of TPU prior service accessions, their affiliation history does not give them the shared institutional experience and range of specific occupations which are common to former Active Army enlistees. The Active Army soldiers transitioning to the USAR are the primary prior service manpower pool for meeting TPU accessions and mobilization requirements.

#### **CHAPTER 3**

#### TRANSITION FROM ACTIVE DUTY

Prior service Selected Reserve TPU recruits may be drawn from several categories - those completing all military obligation and returning to civilian life, direct transfers to USAR TPUs or ARNG TPUs, members of the IRR, and retirees. Some of those who leave active duty are not eligible for TPU service - age, medical condition, level of physical fitness or behavioral history may limit qualification for a place in a drilling TPU.

Each of the services uses its own coding scheme for classifying the reason for separation from active service. DMDC converts these branch-specific codes into a homogeneous set of interservice separation codes (ISCs) for interservice comparisons and for Department of Defense (DoD)-wide analyses. We used the Army's separation program designator (SPD) to classify losses into eight groups:

Transferred to Reserve Components

Discharged - eligible for Reserve service

Discharged - ineligible for Reserve service

Retired

Reenlisted - including entry in officer programs

Special separation programs - RIF, VSI, and SSB programs

Other transactions - desertion, imprisonment, record corrections, MIA-POW

Death

The specific Army SPD codes identifying individuals in these groups are included in Appendix A.

Table 1 shows the separation status by gender of the 177,023 Active Army enlistees who reached the end of their active duty obligation in FY 1993, and Figure 1 illustrates the distribution of all losses among transition categories. Forty-one percent of FY 1993 losses were,

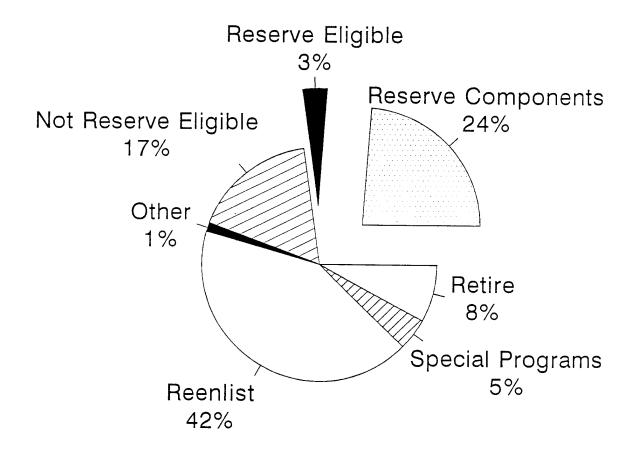
TABLE 1
TRANSITION CATEGORY BY GENDER, FY 1993
ACTIVE ARMY ENLISTED LOSSES
(Number and Percent)

	Male	s	Femal	es	Total		
Transition Category	Number	<b>%</b>	Number	<b>%</b>	Number	• %	
Transferred to Reserve Components	36,782	23.7	6,149	27.8	42,931	24.3	
Discharged-eligible for Reserve Service	4,967	3.2	997	4.5	5,964	3.3	
Discharged-not eligible for Reserve Service	26,741	17.3	4,371	19.8	31,112	17.6	
Retired	13,344	8.6	651	3.0	13,995	7.9	
Reenlisted in Active Army (includes officer pro- grams)	63,649	41.1	8,942	40.4	72,591	41.0	
Special Separation Pro- grams (includes RIF, VSI, SSB)	7,308	4.7	854	3.9	8,162	4.6	
Other Transactions (includes desertion, imprisonment, record correction, MIA-POW)	1,852	1.2	109	0.5	1,961	1.1	
Death	281	0.2	26	0.1	307	0.2	
Total	154,924	100.0	22,099	100.0	177,023	100.0	

in fact, not lost to the Active Army. They choose to reenlist at the end of their most recent commitment to serve on active duty. We have included this group who do not actually leave active duty for several reasons. All transitioning individuals are at a career decision threshold. The factors that influence their choice impact the Army Reserve, since those who meet reenlistment standards and choose to reenlist are unavailable, at least until their next decision point is reached at the end of their new term of service. At completion of each term of service, reenlistment eligible soldiers compare their active duty military work environment, advancement

## TRANSITION CATEGORY FY 1993 ACTIVE ARMY ENLISTED LOSSES

PAYGRADES E1 - E9



Note: Losses to all transition categories=177,023. "Other" includes death and other transactions.

FIG. 1

opportunities, retirement, health and other benefits pay, and personal/family effects with their perceived civilian opportunities (Thomas and Davis 1988). The possibility of maintaining a military affiliation through reserve service can also enter into the decision making process. Military policy, current and anticipated, as well as perceived job opportunities and economic conditions in the civilian sector will influence the attractiveness of the TPU option.

The next largest category, with almost 43,000 losses (24.3 percent), transferred to the Reserve Components on leaving active service. Their active duty commitment was completed, but they had remaining obligated service. These include those going to drilling units as well as members of the Individual Ready Reserve (IRR) and the Standby Reserve. Those entering the IRR must advise the Army of their whereabouts, but address records are often incomplete or out of date. Nonetheless, these nondrilling reservists, if they can be identified and contacted, are an important pool of potential TPU members.

In addition, almost 6,000 (3.3 percent) transitioning Active Army personnel were eligible for reserve service, but did not choose this option. These individuals had completed their total military service obligation (MSO) while on active duty. They represent another market for TPU recruiting, though they are difficult to track, having no obligation to maintain contact with military personnel centers. Though their numbers are small, they have extensive experience and are considered highly desirable potential TPU members.

A larger number of losses, about 31,000 (17.6 percent), were not eligible for reserve service on leaving active duty. An additional nearly 2,000 personnel unqualified for reserve service represented losses due to desertion, imprisonment, MIA-POW status, or the correction of records. Some of these ineligible prior service individuals may qualify for reserve service

at a later date. A physical disability, for example, might be corrected allowing an individual to meet reserve standards for entry. However, most of them are likely to remain ineligible and will not augment the manpower pool. A small number of losses (0.2 percent) were deaths while on active duty.

Reduction in force size has been brought about partly through a set of separation incentive programs. These programs (RIF, VSI, and SSB) account for about 5 percent of FY 1993 Active Army losses. Enlistees choosing to leave active duty through these special options are not considered a part of the target market for reserve recruiting. Special separation programs are structured with disincentives for TPU service. Retired Active Army enlistees who made up nearly 8 percent of the FY 1993 leavers are also generally excluded from reserve marketing strategies, though in some circumstances, these individuals may be recruited and they are an important part of the manpower pool for mobilization.

A surprisingly small portion of those Army enlisted personnel transitioning from the Active Army who do not go directly to the Reserve Components are clearly eligible for reserve service. While some retired active duty individuals and those who are not eligible at separation but later qualify may be a source of reserve enlistments, their numbers are likely to be quite small and the cost of maintaining information on their status, skills, and location would be have to be balanced against possible benefits to the meeting of manpower requirements.

Table 1 provides information on the nature of FY 1993 separations from the Active Army for men and women. While the number of males eligible to leave was more than seven times as great as the number of females (154,924 vs. 22,099), the distributions among the transition categories for the gender groups are very similar. About 40 percent of women in the

file reenlisted, as compared with just over 41 percent of the men. A larger proportion of women than men transferred directly to a Reserve Component (27.8 percent vs. 23.7 percent) and the same was true for Reserve Eligible discharges (4.5 percent vs. 3.2 percent). Women were more likely to be discharged and ineligible for the Reserves (19.8 percent vs. 17.3 percent) but less likely to have participated in special separation programs (3.9 percent vs. 4.7 percent). Men were more than twice as likely as women to have retired (8.6 percent vs. 3.0 percent).

Table 2 shows the distribution to transition categories by race-ethnic group and gender for all paygrades. Higher reenlistment rates for nonwhites are the most striking feature of this table. Blacks, both male and female, were much more likely to reenlist than their counterparts in other race-ethnic groups, a feature of retention typical to both active and reserve service (Thomas and Kocher 1993a). The highest rate was among black women (52 percent) and the lowest among white women (29 percent). Transition to the Reserve Components was more common for whites than for nonwhites, especially Blacks, for both men and women.

Table 3 shows the paygrade distribution by transition category for male FY 1993 Active Army losses. Those who transferred to the Reserve Components were predominantly E4s (75.3 percent), while about half (52.8 percent) of those who were eligible to join the reserves were E5s. Female losses, shown in Table 4, were similarly distributed, with 68.3 percent of transfers to the reserves in paygrade E4 and 39.9 percent of Reserve Eligible leavers in paygrade E5.

TABLE 2
TRANSITION CATEGORY BY RACE-ETHNIC GROUP AND GENDER,
FY 1993 ACTIVE ARMY ENLISTED LOSSES, ALL PAYGRADES
(Percent)

	Race - Ethnic Group								
	White	Black	Hispanic <sup>2</sup>	Other <sup>b</sup>					
Male Losses Transferred to Reserve	(n=95,471)	(n=44,672)	(n=6,983)	(n=7,784)					
Components Discharged-eligible for	26.6	17.4	22.8	25.3					
Reserve Service Discharged-not eligible	3.5	2.9	2.2	3.0					
for Reserve Service	19.3	14.2	13.7	12.5					
Retired Reenlisted in Active Army (includes officer pro-	8.0	9.8	9.7	8.3					
grams) Special Separation Programs (includes RIF,	37.2	48.0	46.6	44.6					
VSI, SSB) Other Transactions (includes desertion, imprisonment, record	4.2	6.1	3.9	4.8					
correction, MIA-POW)	1.0	1.6	1.0	1.2					
Death	0.2	0.2	0.1	0.3					
Total	100.0	100.0	100.0	100.0					
Female Losses	(n=10,337)	(n=9,989)	(n=702)	(n=1,068)					
Transferred to Reserve Components Discharged-eligible for	32.3	22.8	27.1	32.1					
Reserve Service Discharged-not eligible	4.8	4.3	3.7	3.7					
for Reserve Service	27.2	12.7	20.6	13.3					
Retired Reenlisted in Active Army (includes officer pro-	3.1	3.0	3.3	2.2					
grams) Special Separation Programs (includes RIF,	29.0	52.0	41.0	43.1					
VSI, SSB) Other Transactions (includes desertion, imprisonment, record	3.0	4.6	4.0	5.0					
correction, MIA-POW)	0.5	0.5	0.3	0.5					
Death	0.1	0.1	0.0	0.1					
Total	100.0	100.0	100.0	100.0					

TABLE 2, CONT'D

	Race - Ethnic Group								
	White	Black	Hispanic <sup>a</sup>	Other <sup>b</sup>					
-11	(~ 10E 000)	(- FA CC1)	/ 7 COE\	(n=8,852)					
All Losses	(n=105,808)	(n=54,661)	(n=7,685)	(n=6,652)					
Transferred to Reserve									
Components	27.2	18.4	23.1	26.1					
Discharged-eligible for			2.4	2 -					
Reserve Service	3.6	3.1	2.4	3.1					
Discharged-not eligible for Reserve Service	20.1	13.9	14.3	12.6					
TOT WEBSTAS DELATOR	20.1	23.3							
Retired	7.5	8.5	9.1	7.6					
Reenlisted in Active Army									
(includes officer pro-	36.4	48.7	46.1	44.4					
grams) Special Separation Pro-	30.7	70./		33.3					
grams (includes RIF,									
VSI, SSB)	4.0	5.8	3.9	4.8					
Other Transactions									
(includes desertion,									
<pre>imprisonment, record correction, MTA-POW)</pre>	1.0	1.4	1.0	1.1					
COLLECTION, MIN-POW)	<b>I.</b> 0	<b>4.3</b>	1.0						
Death	0.2	0.2	0.1	0.3					
•	100.0	100.0	100.0	100.0					
Total	100.0	100.0	100.0	100.0					
(Missing = 17)									

<sup>&</sup>lt;sup>a</sup>Hispanics may be of any race. They are treated here as a mutually exclusive raceethnic group category.

<sup>&</sup>lt;sup>b</sup>Includes American Indian, Alaskan Native, Asian, Pacific Islander, and Other.

TABLE 3
TRANSITION CATEGORY BY PAYGRADE,
FY 1993 MALE ACTIVE ARMY ENLISTED LOSSES
(Percent)

	Paygrade								
Transition Category	E1-E3	<b>E4</b>	<b>E</b> 5	E6	E7-E9	Total			
Transferred to Reserve Components (n=36,782)	13.9	75.3	10.3	0.5	0.03	100.0			
Discharged-Eligible for Reserve Service (n=4,967)	3.0	30.2	52.8	12.5	1.5	100.0			
Discharged-not eligible for Reserve Service (n=26,741)	69.4	18.9	8.2	2.9	0.6	100.0			
Retired (n=13,344)	1.1	3.1	4.7	20.3	70.9	100.0			
Reenlisted in Active Army (includes officer programs) (n=63,649)	1.6	32.2	34.5	19.2	12.5	100.0			
Special Separation Pro- grams (includes RIF, VSI, SSB) (n=7,308)	16.5	48.1	21.0	9.8	4.6	100.0			
Other Transactions (includes desertion, imprisonment, record correction, MIA-POW) (n=1,852)	72.0	17.2	6.1	3.0	1.7	100.0			
Death (n=281)	28.8	30.3	16.7	10.0	14.2	100.0			
Total (n=154,924)	17.8	38.1	21.2	11.2	11.7	100.0			

TABLE 4
TRANSITION CATEGORY BY PAYGRADE,
FY 1993 FEMALE ACTIVE ARMY ENLISTED LOSSES
(Percent)

	Paygrade								
Transition Category	E1-E3	<b>E4</b>	<u>E5</u>	<b>E6</b>	E7-E9	Total			
Transferred to Reserve Components (n=6,149)	22.1	68.3	<b>9.2</b> .	0.4	0.1	100.0			
Discharged-Eligible for Reserve Service (n=997)	15.3	29.8	39.9	13.7	1.3	100.0			
Discharged-not eligible for Reserve Service (n=4,371)	78.1	15.3	4.8	1.5	0.3	100.0			
Retired (n=651)	3.7	12.0	11.1	20.1	53.1	100.0			
Reenlisted in Active Army (includes officer pro- grams) (n=8,942)	1.7	37.8	34.6	17.3	8.6	100.0			
Special Separation Pro- grams (includes RIF, VSI, SSB) (n=854)	9.9	58.7	21.1	8.0	2.3	100.0			
Other Transactions (includes desertion, imprisonment, record correction, MIA-POW) (n=109)	67.9	20.2	6.4	2.8	2.8	100.0			
Death (n=26)	30.8	38.5	11.5	15.4	3.8	100.0			
Total (n=22,099)	23.8	41.4	20.5	9.0	5.3	100.0			

#### **CHAPTER 4**

#### CHARACTERISTICS OF RESERVE AVAILABLE ACTIVE DUTY LOSSES

Active Army losses entering the Reserve Components and those eligible to do so are the focus of this report. These two transition categories (Reserve Components and Reserve Eligible) make up the annual increment to the pool of "reserve available" prior service individuals. Those going directly to the Reserve Components have a remaining service obligation, while the Reserve Eligible group have completed their obligated service. We have also limited subsequent discussion to losses in transition paygrades E4 and E5, since these paygrades account for the majority of the losses in both transition categories and are the primary target of TPU prior active service recruiting efforts and mobilization manpower requirements.

#### A. PERSONAL INFORMATION

The demographics of a market provide a useful basis for the organization and focus of a manpower program. Personal characteristics have been shown to be important determinants of both enlistment intentions and actual joining behavior (Marquis and Kirby 1989a, c; Thomas and Davis 1988).

#### 1. Gender

The great majority of Army E4-E5 losses available to the Reserves were male, with 35,631 men (86.7 percent) and 5,456 women (13.3 percent) falling into the Reserve Components and Reserve Eligible categories. Table 5 indicates that the percentage of women in each paygrade/transition category was similar. E5s transitioning to the Reserve Components had the highest percent female (16.5 percent) while E4s in the Reserve Eligible had the lowest (12.9 percent). In 1992, Army Selected Reserve membership was about 20 percent female and white

TABLE 5
FY 1993 RESERVE AVAILABLE ACTIVE ARMY LOSSES,
PAYGRADES E4 AND E5, BY GENDER
(Percent)

	Reserve Co	mponents	Reserve Eligible			
	<b>E4</b>	E5	<b>E4</b>	E5		
	(n=31,906)	(n=1,799)	(n=4,365)	(n=3,020)		
Male Losses	86.8	83.5	87.1	86.8		
Female Losses	<u> 13.2</u>	16.5	12.9	<u>13.2</u>		
Total	100.0	100.0	100.0	100.0		

<sup>&</sup>lt;sup>a</sup>Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

Army Reserve prior-service accessions were about 17 percent female (U.S. Department of Defense 1993).

#### 2. Race-ethnic group

Table 6 highlights race-ethnic group representation among reserve available prior service losses for FY 1993. This information, coupled with the gender distribution reveals an interesting pattern of population representation.

While Black losses made up about 24 percent and 18 percent, respectively, of E4 and E5 losses destined for the Reserve Components, they constituted about 31 percent and 29 percent of those who were Reserve Eligible. These values for Black representation among all losses mask great variation by gender. Female E4 losses transitioning to the Reserve Components were almost 40 percent Black and E5s were over 31 percent Black. In contrast, male E4 and E5 losses to the Reserve Components were much less likely to be Black at 22 percent and about 16 percent. An even greater gender/race-ethnic group difference can be seen among the Reserve Eligible, with more than 47 percent of female E4s and above 46 percent of

TABLE 6
RACE-ETHNIC GROUP AND GENDER,
FY 1993 RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Components		Reserve Eligible	
	E4	E5	E4	E5
Male Losses	(n=27,706)	(n=3,801)	(n=1,502)	(n=2,622)
White	68.3	73.7	64.9	65.5
Black	22.0	16.1	28.3	26.2
Hispanic	4.3	4.6	2.5	3.2
Other	<u> 5.4</u>	<u> 5.6</u>	4.3	5.1
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,198)	(n=563)	(n=297)	(n=398)
White	51.0	59.9	45.8	48.0
Black	39.8	31.4	47.4	46.4
Hispanic	3.1	3.2	3.4	1.3
Other	<u>6.1</u>	5.5	3.4	4.3
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,904)	(n=4,364)	(n=1,799)	(n=3,020)
White	66.0	71.9	61.7	63.2
Black	24.3	18.1	31.4	28.8
Hispanic	4.2	4.4	2.7	3.0
Other	<u> 5.5</u>	<u>5.6</u>	4.2	5.0
Total	100.0	100.0	100.0	100.0

Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

E5s identifying themselves as Black. Blacks made up a substantially smaller proportion of the comparable civilian labor force, with about 12 percent of those between 18 and 44 years old in this race-ethnic group (U.S. Department of Defense 1993, p. 6-15).

Hispanic losses did not show the same pattern of representation as did Blacks. Hispanics made up less than 5 percent of the reserve available groups, substantially less than their 9 percent representation in the civilian labor force, ages 18 to 44 (U.S. Department of Defense 1993, p. 6-15). The largest percent Hispanic was among E5 male losses to the Reserve

Components and the lowest was among E5 Reserve Eligible females. Appendix B presents paygrade and transition destination category distributions for race-ethnic groups.

#### 3. Age

Table 7 provides information on the current age of reserve available individuals leaving the Active Army in FY 1993. Reserve available women separating from the Active Army, regardless of paygrade or transition category, were likely to be older than their male cohorts. E4s of both genders were more strongly represented in younger age categories than were E5s. Those eligible for reserve service were older than those who transitioned to the Reserve Components. The proportion under 24 years old at transition ranged from a high of 66.8 percent for male E4s entering the Reserve Components to a low of 3.5 percent for female E5s in the Reserve Eligible category.

#### 4. Family status

Table 8 indicates that, among those entering the Reserve Components, both E4 and E5 Active Army losses were typically unmarried and without dependents. This was true for both men (91.3 percent) and women (87.3 percent) FY 1993 losses. Reserve Eligible E5s were not quite so likely to be without a spouse or dependents (73.3 percent for males and 78.9 percent for females) and Reserve Eligible E4s were even less so, with only about 66 percent of men and women in this family status category. Moreover, Reserve Eligible E4s were more likely than any other group to be married with dependents (24.2 percent for men and 19.9 percent for women).

Reserve Eligible personnel have completed their military obligation, usually an eight year commitment, and are typically older than their counterparts who enter the Reserve

Components. They are therefore more likely to be in the family formation phase of their life cycles. Prior service accessions to the Selected Reserve are more likely to be married than are these 1993 reserve available losses, with about 44 percent of all-service Selected Reserve recruits married at accession in FY 1992 (Department of Defense 1993, p. D-15).

TABLE 7
AGE AT TRANSITION BY GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Components		Reserve Eligible	
	E4	E5	E4	E5
(Years)				
Male Losses	(n=27,685)	(n=3,798)	(n=1,501)	(n=2,621)
Less than 20	(H=27,005) 1.1	0.6	(H=1,301) 1.1	0.7
20 - 23	65.7	29.9	8.3	3.0
24 - 28	25.4	46.8	47.2	33.7
29 and over	<u>7.8</u>	<u>22.7</u>	43.4	<u>62.6</u>
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,191)	(n=563)	(n=296)	(n=398)
Less than 20	1.7	1.8	0.7	1.0
20 - 23	55.0	19.7	22.0	2.5
24 - 28	30.6	42.6	29.0	25.6
29 and over	<u>12.7</u>	<u>35.9</u>	48.3	70.9
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,876)	(n=4,361)	(n=1,797)	(n=3,019)
Less than 20	1.2	0.8	1.0	0.7
20 - 23	64.3	28.5	10.5	2.9
24 - 28	26.1	46.3	44.2	32.7
29 and over	8.4	24.4	44.2	63.7
Total	100.0	100.0	100.0	100.0
(Missing = 37)				

a Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

TABLE 8
FAMILY STATUS AT TRANSITION BY GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Components		Reserve Eligible	
	<b>E4</b>	E5	<b>E4</b>	E5
Male Losses Single, no	(n=27,538)	(n=3,764)	(n=1,476)	(n=2,589)
dependents	91.3	83.8	66.4	73.3
Single, with dependents	0.9	0.6	2.1	1.1
Married, no dependents	1.5	7.4	7.3	16.5
Married, with dependents	1 <u>6.3</u>	8.2	24.2	9.1
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,171)	(n=559)	(n=291)	(n=394)
Single, no dependents	87.3	82.7	66.3	78.9
Single, with dependents	1.2	0.7	3.1	1.0
Married, no dependents	3.7	8.2	10.7	11.7
Married, with dependents	1	<u>8.4</u>	19.9	8.4
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,709)	(n=4,323)	(n=1,767)	(n=2,983)
Single, no dependents Single, with	90.8	83.7	66.4	74.0
dependents Married, no	0.9	0.6	2.3	1.1
dependents	1.8	7.5	7.8	15.9
Married, with dependents	6.5	8.2	<u>23.5</u>	9.0
Total	100.0	100.0	100.0	100.0
(Missing = 308)	•			

(Missing = 308)

<sup>&</sup>lt;sup>a</sup>Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

#### 5. Education

The highest level of education attained by Active Army losses reflects, to some extent, the standards in force at the time of active duty enlistment. In addition, Active Army reenlistment standards often limit active duty retention opportunities for those with low levels of education. Thus, Table 9 shows the lowest proportion of high school degree holders and above among Reserve Eligible males, since this is the group that entered the Active Army in the early to mid 1980s when educational requirements were less stringent (for males). Similarly, GED holders were most prevalent among male Reserve Eligible E4s and E5s who entered active duty service at an earlier date. More non-high school graduates were recruited in earlier years, and many of these were able to obtain a GED while in the service.

College experience was more common among women than men in all paygrade and transition categories, reflecting differences in standards at time of entry. More than 11 percent of female E5s transitioning to the Reserve Components were graduates of a 4-year college.

#### B. ACTIVE DUTY ENTRY CHARACTERISTICS

#### 1. Age at Entry

Reserve available E4 and E5 female enlisted losses were older at entry than were their male counterparts, as shown in Table 10. The majority (56.2 percent) of E4 males transitioning to the Reserve Components were under 20 years of age when they entered active duty service and only 6.6 percent were at least 25. In contrast, only 21.3 percent of E4 females in the Reserve Eligible category were under 20 years old when they began active duty service and 27.3 percent were 25 or older.

TABLE 9
HIGHEST LEVEL OF EDUCATION AND GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Co	mponents	Reserve Eligible	
	<b>E4</b>	E5	<b>E4</b>	E5
Male Losses Less than 4 years	(n=27,697)	(n=3,798)	(n=1,502)	(n=2,622)
high school	1.0	0.6	0.5	0.2
GED	3.5	4.4	9.8	8.3
High school degree	93.3	85.4	87.7	86.1
Some college	1.1	4.0	0.9	3.0
4 year college de- gree or higher	1.1	5.6	1.1	2.4
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,195)	(n=563)	(n=296)	(n=398)
Less than 4 years high school	0.2	0.3	0.7	0.0
GKD	0.7	0.7	0.3	2.0
High School degree	94.3	81.0	93.6	87.2
Some college	2.5	6.6	3.0	7.8
4 year college de- gree or higher	2.3	11.4	2.4	3.0
Total	100.0	100.0	100.0	100.0
All Losses Less than 4 years	(n=31,892)	(n=4,361)	(n=1,798)	(n=3,020)
high school	0.9	0.5	0.6	0.2
GKD	3.2	3.9	3.9	7.5
High School degree	93.4	84.9	88.7	86.2
Some college	1.3	4.3	1.2	3.6
4 year college de- gree or higher	1.2	6.3	1.3	2.5
Total	100.0	100.0	100.0	100.0
(Missing = 34)				

<sup>&</sup>lt;sup>a</sup>Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

TABLE 10
AGE AT SERVICE ENTRY BY GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Components		Reserve Eligible	
	E4	E5	E4	E5
(Years)				
Male Losses	(n=27,520)	(n=3,739)	(n=1,459)	(n=2,533)
Less than 18	1.9	1.9	2.3	2.2
18 - 19	54.3	45.1	23.6	40.5
20 - 24	37.2	41.0	53.3	44.4
25 and over	6.6	12.0	20.8	12.9
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,154)	(n=552)	(n=290)	(n=382)
Less than 18	2.8	1.6	0.3	1.8
18 - 19	45.3	33.0	21.0	34.0
20 - 24	40.6	44.2	51.4	44.8
25 and over	11.3	21.2	<u>27.3</u>	<u> 19.4</u>
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,674)	(n=4,291)	(n=1,749)	(n=382)
Less than 18	2.0	1.9	2.0	2.1
18 - 19	53.1	43.5	23.2	34.0
20 - 24	37.6	41.4	53.0	44.5
25 and over	<u>7.3</u>	<u>13.2</u>	21.8	<u>13.7</u>
Total	100.0	100.0	100.0	100.0
(Missing = 461)	ı			

a Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

#### 2. Geographic region

The home of record is the permanent home of a service member when he or she enlists. The Army, unlike the other services, freezes the home of record at entry and it cannot be changed, even at reenlistment. The geographic location an exiting service member chooses

on leaving active duty may well differ from his or her home at the time of enlistment, but the home of record is often the most reliable indication of location for reserve recruiting purposes (Gorman and Mehay 1990). Table 11 shows the state and census region for home of record for E4s and E5s entering the Reserve Components or eligible for reserve service. The North East region was the home of record for only about 14 percent of reserve available E4-E5 losses. The percentage of the population ages 18 to 43 residing in the North East for 1993 was 20 percent (U.S. Department of Commerce 1989). The West census region showed a similar pattern with about 19 percent of the home of record distribution and 22 percent of the comparable U.S. population. The region serving as the home of record for the largest number of losses was the South, with almost 41 percent of the total. The comparable population percentage for this region was 35 percent. The Midwest census region was also over-represented in the home of record distribution, relative to its contribution to total population in the relevant age groups (almost 26 percent of losses vs. 23 percent of the comparable population).

#### 2. Mental group

The military services use the Armed Services Vocational Aptitude Battery (ASVAB) to evaluate applicants for entrance and occupational assignment (U.S. Department of Defense 1992c). The Armed Forces Qualification Test, or AFQT, is a specific aptitude composite based on three ASVAB subtests: arithmetic reasoning, word knowledge, and paragraph comprehension. It is the primary mental qualification screening device for entrance into the military.

AFQT scores are usually reported as categories, with those scoring above the 50th percentile (based on national norms) considered above average in trainability and usually

# TABLE 11 HOME OF RECORD STATE AND CENSUS REGION, FY 1993 RESERVE AVAILABLE ARMY ENLISTED LOSSES, PAYGRADES E4 AND E5

Region and State	Number	Percent
North East (20% of U.S. pop.)	<u>5,676</u>	<u>13.9</u>
Connecticut	286	0.7
Massachusetts	508	1.2
Maine	246	0.6
New Hampshire	170	0.4
New Jersey	583	1.4
New York	1,981	4.8
Pennsylvania	1,721	4.2
Rhode Island	77	0.2
Vermont	104	0.3
South (35% of U.S. pop.)	16,612	40.6
Alabama	836	2.0
Arkansas	<b>534</b>	1.3
District of Columbia	92	0.2
Delaware	103	0.3
Florida	2,274	5.6
Georgia	1,346	3.3
Kentucky	733	1.8
Louisiana	1,023	2.5
Maryland	604	1.5
Mississippi	<b>578</b>	1.4
North Carolina	1,287	3.1
Oklahoma	622	1.5
South Carolina	745	1.8
Tennessee	750	1.8
Texas	3,585	8.8
Virginia	1,066	2.6
West Virginia	434	1.1
Midwest (23% of U.S. pop.)	10,567	<u>25.8</u>
Iowa	505	1.2
Illinois	1,794	4.3
Indiana	980	2.4
Kansas	416	1.0
Michigan	1,961	4.8
Minnesota	662	1.6
Missouri	863	2.1
North Dakota	154	0.4
Nebraska	233	0.6
Ohio	1,932	4.7

Table 11, Cont'd.

	<u>Number</u>	Percent
South Dakota	183	0.4
Wisconsin	904	2.2
West (22% of U.S. pop.)	7,588	<u> 18.6</u>
Alaska	73	0.2
Arizona	655	1.6
California	3,333	8.2
Colorado	613	1.5
Hawaii	153	0.4
Idaho	260	0.6
Montana	224	0.5
New Mexico	289	0.7
Nevada	159	0.4
Oregon	588	1.4
Utah	181	0.4
Washington	941	2.3
Wyoming	119	1.1
Other U.S. Areas	<u>440</u>	<u>1.1</u>
TOTAL	40,883	100.0
(Missing or not U.S. = 207)		

Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

described as "high quality". Individuals scoring between the 31st and 49th percentile are eligible to enlist, but they are not considered as trainable as those with higher scores. Those scoring below the 31st percentile are considered very limited in trainability and few are enlisted. Three subgroups (I, II, and IIIA) are distinguished among the "high quality" scores. The AFQT categories and their corresponding percentile ranges are:

b Population ages 18 to 43.

Includes: American Samoa (N=17), Guam (N=49), Puerto Rico (N=310), Trust Territories (N=15), Virgin Islands (N=49)

Category I 93-100
Category II 65-92
Category IIIA 50-64
Category IV 10-30
Category V 1-9

Table 12 presents the distribution of mental group category for FY 1993 reserve available active duty losses in paygrades E4 and E5. E5s entering the Reserve Components had the highest proportion of Category I and II members, with 51 percent of men and almost 55 percent of women scoring in these upper mental qualification groups. Reserve Eligible E5s had the largest percentage of very low AFQT scores, with 14.4 percent of men and 7.9 percent of women in Category IV and below. In both transition categories, lower mental group qualification standards at the time of entry for those who have served the longest may account for the low scores of Reserve Eligible E5s. Active Army reenlistment standards may also play a role.

In all four paygrade/transition categories, the proportion of women in the "high quality" categories (I-IIIA) was greater than the proportion of men qualifying at this level.

Again, differential entrance standards probably account for this phenomenon (Eitelberg 1988).

#### 3. Term of enlistment

Table 13 shows that the term of service selected by transitioning enlistees on entering active duty service was shorter for E4s entering the Reserve Components than for other paygrade/transition category groups for both men and women, though the 4 year term of enlistment was the most common for all. Female E4s in the Reserve Eligible category showed the greatest percentage selecting a six year term (9.1 percent). The most striking difference here was the much lower incidence (4.6 percent) of two year enlistments for Reserve Eligible E4s as compared to Reserve Component E4s (21.1 percent). Military enlistment policy influences

TABLE 12 AFQT<sup>a</sup> MENTAL GROUP CATEGORY AND GENDER, FY 1993 RESERVE AVAILABLE ACTIVE ARMY **ENLISTED LOSSES, PAYGRADES E4 AND E5** (Percent)

	Reserve Co	mponents	Reserve	Eligible
	E4	E5	<b>E4</b>	E5
Male Losses	(n=27,337)	(n=3,732)	(n=1,465)	(n=2,571)
Categories I & II	37.9	51.0	29.9	35.0
Category IIIA	26.8	22.5	26.3	21.4
Category IIIB	29.9	23.1	38.2	29.2
Category IV & belo	w <u>5.4</u>	3.4	<u> 5.6</u>	14.4
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,134)	(n=557)	(n=291)	(n=394)
Categories I & II	33.5	54.7	27.5	34.8
Category IIIA	32.9	25.5	33.0	23.8
Category IIIB	33.4	19.6	39.2	33.5
Category IV & belo	w <u>0.2</u>	0.2	0.3	7.9
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,471)	(n=4,289)	(n=1,756)	(n=7,254)
Categories I & II	37.3	51.5	29.5	35.0
Category IIIA	27.6	22.8	27.4	21.8
Category IIIB	30.4	22.7	38.4	29.7
Category IV & belo	w <u>4.7</u>	3.0	4.7	13.5
Total	100.0	100.0	100.0	100.0
(Missing = 609)				

a 1980 metric.

b Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

TABLE 13
TERM OF ENLISTMENT AND GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Co	mponents	Reserve	Eligible
	<b>E4</b>	E5	<b>E</b> 4	E5
Male Losses	(n=27,084)	(n=3,662)	(n=1,446)	(n=2,560)
2 years	21.8	3.9	5.1	2.1
4 years	75.2	90.1	92.6	96.8
6 years	3.0	6.0	2.3	1.1
Total	100.0	100.0	100.0	100.0
Female Losses	(n=4,106)	(n=544)	(n=286)	(n=391)
2 years	17.0	5.0	2.1	2.1
4 years	74.0	89.7	88.8	96.9
6 years	9.0	5.3	9.1	1.0
Total	100.0	100.0	100.0	100.0
All Losses	(n=31,190)	(n=4,206)	(n=1,732)	(n=2,951)
2 years	21.1	4.1	4.6	2.1
4 years	75.0	90.0	92.0	96.8
6 years	<u>3.9</u>	5.9	<u>3.4</u>	1.1
Total	100.0	100.0	100.0	100.0
(Missing = 1,011)				

a Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

term lengths offered to recruits, and policy varies over time with the needs of the services.

#### C. MILITARY SERVICE CHARACTERISTICS

# 1. Most recent promotion

Average time in grade at transition is shown in Table 14. Time since last promotion differs greatly by transition category, with the Reserve Eligible group members

TABLE 14
MILITARY SERVICE CHARACTERISTICS AND GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Mean)

	Reserve Co	mponents	Reserve	Eligible
	<b>E4</b>	E5	<b>E4</b>	E5
Male Losses Months in grade	(n=27,705)	(n=3,801)	(n=1,502)	(n=2,622)
at transition	21.1	18.8	46.4	47.7
TAFMS <sup>b</sup> (months)	44.7	64.5	75. <b>4</b>	105.4
Female Losses Months in grade	(n=4,196)	(n=564)	(n=297)	(n=398)
at transition	23.0	18.9	40.8	47.6
TAFMS <sup>b</sup> (months)	45.1	64.9	64.5	107.2
All Losses	(n=31,842)	(n=4,365)	(n=1,799)	(n=3,020)
Months in grade at transition	21.4	18.8	45.5	47.7
TAFMS <sup>b</sup> (months)	44.7	64.5	73.6	105.6
(Missing = 64)				

Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

having spent more than twice the time in grade as those entering the Reserve Components, regardless of paygrade. Reserve eligible losses finished their MSO while in the Active Army. Men and women enlistees did not show much difference in recent promotion experience. Time in grade averaged 21.4 months and 18.8 months for E4s and E5s, respectively in the Reserve Components while the averages for Reserve Eligible E4s and E5s were closer to 4 years, at 45.5 and 47.7 months, respectively. TPU promotion opportunities may be a factor in the reserve enlistment decisions of those with lengthy time in grade.

b Total active Federal military service.

## 2. Length of service

Table 14 also provides the average length of service for reserve available active duty losses. Those E4s entering the Reserve Components had served a little less than four years (44.7 months) while E5s in this transition category had served about 20 months longer, on average. In the Reserve Eligible group, E4s had served a little over 6 years but E5s had served much longer, averaging almost nine years. Female E4s leaving active service and entering the Reserve Components had served about 10 months less than their male counterparts but time in service was about the same for male and female E5s in this transition category. This pattern was very similar among the Reserve Eligible, with a ten month difference for E4s (men's service greater than women's) and less than a two year difference for E5s (women's service exceeding men's). Again, this difference between transition categories is due to the Reserve Eligible losses finishing their MSO while on active duty.

### 3. Military occupational specialty

The Department of Defense groups military occupational specialties (MOSs) into eight areas with similar job characteristics (U.S. Department of Defense 1992b). Table 15 shows the distribution of reserve available FY 1993 active duty losses by Department of Defense occupational area for men and women. The occupation distribution is quite different for men and women, reflecting both the restriction of combat jobs and differences in qualification for technical MOS training (Thomas and Kocher 1993b; Firestone 1992).

Reserve unit readiness is dependent on filling authorized positions with individuals qualified in their military occupation. Recruit training in an occupational specialty for the Active Army usually is accomplished in a several month period before assignment to a unit. Reservists,

TABLE 15
OCCUPATIONAL AREAS AND GENDER, FY 1993
RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Co	mponents	<u>Reserve Eligible</u>		
	E4	E5	E4	E5	
Male Losses	(n=27,700)	(n=3,801)	(n=1,502)	(n=2,622)	
Combat	37.4	32.3	25.4	25.0	
Electronic equip- ment repair Communications and	3.9	4.5	3.9	5.0	
intelligence	14.6	16.8	13.4	13.1	
<b>Health</b> care	5.2	5.6	5.5	6.7	
Technical and allied Functional support	1.7	3.3	1.9	2.6	
and admin. Electrical/mechan-	7.6	6.8	10.2	8.3	
ical equipment repair	16.6	18.0	21.4	21.4	
Craftsmen	1.9	1.8	3.2	2.6	
Service and supply handlers	10.7	10.7	14.8	15.3	
Non-occupational Total	$\frac{0.4}{100.0}$	$\frac{0.2}{100.0}$	$\frac{0.3}{100.0}$	$\frac{\textbf{0.0}}{\textbf{100.0}}$	
Female Losses Combat	(n=4,197) 1.7	(n=563) 3.2	(n=296) 2.4	(n=398) 4.5	
ment repair	1.5	2.1	1.0	1.5	
Communications and intelligence	15.5	22.2	12.5	15.1	
Health care	17.4	21.1	16.5	23.1	
Technical and allied	1.3	3.7	1.4	1.8	
Functional support and admin. Electrical/mechan-	32.6	24.3	36.8	32.9	
ical equ <b>ipme</b> nt repair	9.0	6.8	11.5	5.5	
Craftsmen	1.0	0.4	0.3	1.3	
Service and supply handlers	19.5	16.0	16.6	14.3	
Non-occupational	$\frac{0.5}{100.00}$	$\frac{0.2}{100.0}$	$\frac{\textbf{1.0}}{\textbf{100.0}}$	$\frac{0.0}{100.0}$	

TABLE 15, Cont'd.

All Losses Combat Electronic equip-	(n=31,897) 32.7	(n=4,364) 28.6	(n=1,798) 21.7	(n=3,020) 22.3
ment repair Communications and	3.6	4.2	3.4	4.5
intelligence	14.8	17.5	13.3	13.4
Health care Technical and	6.8	7.7	7.4	8.8
allied Functional support	1.6	3.3	1.8	2.5
and admin. repai Electrical/mechan- ical equipment	ir 10.9	9.0	14.6	11.6
repair	15.6	16.5	19.7	19.3
Craftsmen Service and supply	1.8	1.6	2.7	2.4
handlers	11.8	11.4	15.1	15.2
Non-occupational Total	$\frac{0.4}{100.0}$	$\frac{0.2}{100.0}$	$\frac{0.4}{100.0}$	$\frac{\textbf{0.0}}{\textbf{100.0}}$

a Occupational areas are based on Department of Defense Occupational Conversion Standards (Department of Defense 1993).

however, are available only on a part-time basis and may be located at some distance from training facilities. Nonprior service recruits receive full-time training in a military skill, as well as basic training and so occupational qualification may require a considerable period of time and expense. In contrast, if an already qualified prior service reserve recruit can be placed in his or her active duty military occupational specialty (MOS), only limited extra training will be required and reserve readiness will be enhanced much more quickly. Those prior service reserve recruits whose military skill cannot be matched with an available job will learn a new set of skills via part-time on-the-job training in the reserve unit, which may be a lengthy process (Buddin and Grissmer 1994). Mismatches have been estimated to occur for about 53 percent

b Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

of new prior service Army Reserve recruits in paygrades E4 and below and for about 44 percent in paygrade E5 and above (Grissmer, et al. 1989 p. 90; Marquis and Kirby 1989c, pp. 42-49).

The likelihood of a match between reserve needs and active duty skills varies with the individual's MOS. Those with combat skills are less likely than the average to be assigned to a similar reserve job as are those in high-skill noncombat occupations (except for those in the health care area). Prior service reserve recruits in low-skill noncombat occupations are more likely than the average to be placed in a similar job in the Army Reserve (Grissmer, et al. 1989, p. 91).

Some skills essential to reserve readiness are in chronically limited supply and are considered priority Army Reserve occupations. This group of critical occupations includes selected medical, signal, transportation, military intelligence, chemical, and aviation specialists. Appendix Table C-1 lists three-digit PMOS codes for FY 1993 Active Army losses trained in priority occupations for the Army Reserve.

Table 16 shows the percentage of reserve available Active Army losses with priority MOSs. About 28 percent of all reserve available E4-E5 transitioning personnel qualified for priority occupations. Although the majority of those in priority MOSs are men (80.3 percent), a larger proportion of women in all paygrade/transition groups filled such jobs. Female E5s entering the Reserve Components were the transition/paygrade category most likely to be in a priority occupation (56.0 percent), while male E4s transitioning to the Reserve Components were the least likely (24.4 percent). This gender difference is explained by the restriction of most combat jobs to men in the Active Army.

TABLE 16
PRIORITY PRIMARY MILITARY OCCUPATIONAL GROUP
BY GENDER, FY 1993 RESERVE AVAILABLE ACTIVE ARMY
ENLISTED LOSSES, PAYGRADES E4 AND E5
(Percent)

	Reserve Co	mponents	Reserve	Eligible
	E4	E5	E4	E5
Male Losses % priority	(n=27,700)	(n=3,801)	(n=1,502)	(n=2,622)
PMOS	24.4	32.6	27.3	31.2
Female Losses % priority	(n=4,197)	(n=563)	(n=296)	(n=398)
PMOS	39.4	56.0	36.2	45.2
All Losses % priority	(n=31,897)	(n=4,364)	(n=1,798)	(n=3,020)
PMOS	26.4	35.6	29.0	33.0
(Missing = 11)				

<sup>&</sup>lt;sup>a</sup>PMOS codes identifying priority occupations for the Army Reserve are listed in Appendix C.

b Reserve available includes those losses transferring to Reserve Components and other losses eligible for Reserve service.

#### **CHAPTER 5**

# SUMMARY PROFILES AND CONCLUSIONS

# A. PROFILES OF RESERVE AVAILABLE ACTIVE ARMY LOSSES

## 1. A loss to the Reserve Components

About 24 percent of FY 1993 Active Army losses entered the Reserve Components. The prototypical individual in this transition category was a white male E4 between the ages of 20 and 23. His family status was single without dependents. He was a high school graduate who had entered the Active Army when he was about 19 years old from a state in the South census region. He had scored in the mental group category I-IIIA on the AFQT and had enlisted initially for a four year term of service. He had reached his transition rank a little less than two years prior to separation and had served for almost five years when he left active duty at about 23 years of age. His military occupational specialty was not a priority MOS for the Selected Reserve.

Over 80 percent of the E4s and E5s entering the Reserve Components were male. Female losses in this transition category were more likely to be nonwhite than were male losses. Blacks were more strongly represented among these losses (both male and female) than among the comparable civilian population, while the opposite was true for Hispanics. About 24 percent of E4s and 27 percent of E5s entering the Reserve Components were trained for active duty jobs that correspond with priority Selected Reserve occupations. Women, because of restricted eligibility for combat-related active duty occupations, were more frequently working in the kinds of jobs that are needed for the Selected Reserve's combat support role.

#### 2. A reserve eligible loss

Only about 3 percent of FY 1993 Active Army losses had completed their military obligation and were also qualified to elect to serve in the Reserves. A typical Reserve Eligible leaver was a white male E5 with nearly nine years of service. He had begun Active Army service by enlisting for a four year term when he was between 20 and 24 years old. A high school diploma graduate, his AFQT score placed him in the "high quality" mental group (Category I-IIIA). He had been an E5 for almost four years when he separated at age 29 or over. His military occupation was in a nonpriority specialty area.

The gender and race-ethnic group distributions for Reserve Eligible losses were very similar tho those for losses transitioning to the Reserve Components, though blacks were even more strongly represented. Reserve Eligible losses were older and more likely to be married with dependents than were those entering the Reserve Components, reflecting their longer active duty service. About 25 percent of E5s were trained in military occupations in high demand by Selected Reserve units. Women were more likely to have served in these reserve priority jobs due to restricted entry to combat occupations.

#### B. CONCLUSIONS

About 28 percent of the 177,023 Active Army losses for FY 1993 either transferred to the Reserve Components with some remaining service obligation, or had both completed all of their obligated service and were eligible for reserve service. These individuals represent the annual increment to the pool of recently trained prior service individuals available for Army Selected Reserve service.

Current USAR plans call for prior service accessions to make up 55 to 60 percent of total

annual accessions to Selected Reserve TPUs (see Appendix D for sources of 1994 TPU accessions). This policy implies an annual inflow of 25,000 to 30,000 prior service individuals. Reserve available Active Army losses for FY 1993 numbered only about 48,000. Those in paygrades E4 and E5, the target pool of prior service manpower accounted for just over 41,000 FY 1993 Active Army losses. Not all of the losses in this group were trained in occupations needed by Selected Reserve TPUs. The mission of these TPUs is such that few individuals with combat skills are required, but almost 37 percent of FY 1993 losses transitioning to the Reserve Components and about 25 percent of Reserve Eligible losses were trained in combat occupations.

Among the combat support and support services occupations characterizing the Selected Reserve, some occupational specialties in medical, signal, transportation, military intelligence, aviation, and chemical areas are in especially short supply in TPUs. Only about 28 percent of FY 1993 reserve available Active Army losses in paygrades E4-E5 had an active duty occupation among this priority group of MOSs critical to TPU readiness (see Table 16 and Appendix C).

Retraining prior service recruits whose skills do not match TPU needs is expensive and may require considerable time if undertaken during weekend drills and annual training. Retraining in new or related skills and the updating of rusty skills may, alternatively, be accomplished through greater use of full-time active duty prior service training programs.

Years of Active Army service provide prior service individuals with knowledge of the military environment and specialized training and experience in military jobs, making them a very valuable manpower resource. Their numbers are limited and will vary with Active Army recruiting and reenlistment policy, but with careful attention to occupational matching and innovative approaches to retraining, this pool of prior service individuals can be a great asset to the Reserve Components in meeting their goals.

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# APPENDIX A

# TABLE A-1 ARMY SEPARATION PROGRAM DESIGNATOR CODES FOR TRANSITION CATEGORIES

Transfer to Reserve Components	LFV,	_	LHJ,	LDG,	MDG,	LFT, LFC, MDN,
Eligible for Reserve Service	-	KCB, KDG,	_	_	JBM,	KDB,
Ineligible for Reserve Service	JAD, JFS, JJD, JKN, KDK,	JFR, JDK, JFV, JKB, JKQ, KFN, JND,	KDK, JFX, JKD, JPC, KFS,	JFF, JGA, JKF, JPD, KGF,	JFC, JHJ, JKK, JRA, JFB,	JFP, JJC, JKM, JRB, JEC,
Retire	RBD,	SFJ,	SFK			
Renlist	KHC,	KGL,	KGN,	KGX,	948	
Special Programs	MCA, KCA	MCB,	LCC,	KCC,	KBC,	JCC,
Other Transactions	941,	942,	950,	979,	985	
Death	944,	945,	946			

# **APPENDIX B**

# TABLE B-1 TRANSITION CATEGORY BY PAYGRADE, FY 1993 WHITE ACTIVE ARMY ENLISTED LOSSES (Percent)

	Paygrade					
Transition Category	E1-E3	<b>E4</b>	<u>E5</u>	<u>E6</u>	E7-E9	Total
Transferred to Reserve Components (n=28,769)	15.4	73.2	10.9	0.5	0.02	100.0
Discharged-Eligible for Reserve Service (n=3,803)	5.0	29.2	50.2	14.0	1.6	100.0
Discharged-not eligible for Reserve Service (n=21,279)	73.0	16.8	7.1	2.6	0.5	100.0
Retired (n=7,984)	1.4	3.4	4.2	17.4	73.6	100.0
Reenlisted in Active Army (includes officer pro- grams) (n=36,482)	2.1	32.5	34.4	18.7	12.3	100.0
Special Separation Pro- grams (includes RIF, VSI, SSB) (n=4,275)	16.0	52.1	18.2	8.7	5.0	100.0
Other Transactions (includes desertion, imprisonment, record correction, MIA-POW) (n=1,033)	73.8	16.3	5.9	2.5	1.5	100.0
Death (n=26)	29.5	32.8	17.5	10.4	9.8	100.0
Total (n=105,808)	21.3	38.7	79.9	9.7	10.4	100.0
(missing=21)						

TABLE B-2
TRANSITION CATEGORY BY PAYGRADE,
FY 1993 BLACK ACTIVE ARMY ENLISTED LOSSES
(Percent)

	Paygrade					
Transition Category	E1-E3	<b>E4</b>	<b>E</b> 5	<b>E6</b>	E7-E9	Total
Transferred to Reserve Components (n=10,065)	14.6	77.1	7.9	0.4	0.02	100.0
Discharged-Eligible for Reserve Service (n=1,705)	4.8	33.2	51.1	9.6	1.3	100.0
Discharged-not eligible for Reserve Service (n=7,612)	64.4	22.8	9.3	2.8	0.7	100.0
Retired (n=4,640)	0.9	3.8	6.4	25.0	63.9	100.0
Reenlisted in Active Army (includes officer pro- grams) (n=26,630)	1.1	34.4	35.3	18.4	10.8	100.0
Special Separation Pro- grams (includes RIF, VSI, SSB) (n=3,166)	16.2	45.7	24.8	10.3	3.0	100.0
Other Transactions (includes desertion, imprisonment, record correction, MTA-POW) (n=751)	69.7	17.8	7.5	3.3	1.7	100.0
Death (n=92)	26.1	30.4	14.1	12.0	17.4	100.0
Total (n=54,661)	14.4	38.4	23.6	12.5	11.1	100.0
(missing=8)						

TABLE B-3
TRANSITION CATEGORY BY PAYGRADE,
FY 1993 HISPANIC<sup>a</sup> ACTIVE ARMY ENLISTED LOSSES
(Percent)

	<u>Paygrade</u>					
Transition Category	E1-E3	<b>E4</b>	E5	<u>E6</u>	E7-E9	Total
Transferred to Reserve Components (n=1,779)	14.0	74.8	10.9	0.2	0.1	100.0
Discharged-Eligible for Reserve Service (n=181)	7.8	26.5	49.2	14.4	2.1	100.0
ischarged-not eligible for Reserve Service (n=1,101)	72.6	15.7	7.6	3.6	0.5	100.0
Retired (n=699)	1.4	1.9	3.9	21.9	70.9	100.0
eenlisted in Active Army (includes officer pro- grams) (n=3,545)	1.3	27.7	31.1	24.0	15.9	100.0
pecial Separation Pro- grams (includes RIF, VSI, SSB) (n=297)	9.1	45.8	21.2	14.8	9.1	100.0
ther Transactions (includes desertion, imprisonment, record correction, MTA-POW) (n=73)	72.6	19.2	1.4	2.7	4.1	100.0
Death (n=10)	20.0	20.0	10.0	10.0	40.0	100.0
Total (n=7,685)	15.6	35.1	20.3	14.6	14.4	100.0
(missing=0)						

a Hispanics may be of any race. They are treated here as a mutually exclusive race-ethnic group category.

TABLE B-4
TRANSITION CATEGORY BY PAYGRADE, OTHER
RACE-ETHNIC GROUP ACTIVE ARMY ENLISTED LOSSES
(Percent)

	Paygrade					
Transition Category	E1-E3	<b>E4</b>	E5	<b>E6</b>	E7-E9	Total
Transferred to Reserve Components (n=2,313)	13.9	75.1	10.5	0.4	0.1	100.0
Discharged-Eligible for Reserve Service (n=274)	5.1	27. <b>4</b>	54.8	12.0	0.7	100.0
Discharged-not eligible for Reserve Service (n=1,119)	65.7	22.3	7.9	3.7	0.4	100.0
Retired (n=670)	0.8	2.8	5.7	20.6	13.3	100.0
Reenlisted in Active Army (includes officer pro- grams) (n=3,932)	1.3	31.6	33.4	20.4	13.3	100.0
Special Separation Pro- grams (includes RIF, VSI, SSB) (n=424)	14.9	48.1	22.4	0.1	4.5	100.0
Other Transactions (includes desertion, imprisonment, record correction, MIA-POW) (n=98)	67.3	24.5	3.1	4.1	1.0	100.0
Death (n=22)	40.9	22.7	18.2	4.6	13.6	100.0
Total (n=8,852)	14.3	40.2	21.8	12.1	11.6	100.0
(missing=2)			a			

a Includes American Indian, Alaskan Native, Asian, Pacific Islander, Other.

# **APPENDIX C**

TABLE C-1
PRIMARY MILITARY OCCUPATIONAL SPECIALTY<sup>a</sup>, CODE FY 1993
RESERVE AVAILABLE<sup>b</sup> ACTIVE ARMY LOSSES IN PRIORITY
OCCUPATIONS<sup>c</sup>, PAYGRADES E4 AND E5
(Number and Percent)

	Male	Female	All	
	Losses	Losses	Losses	
Medical	1,953	1,032	<u>2,985</u>	
	(21.2)	(45.7)	(26.0)	
01H	0	2	12	
35G	19	10	29	
35 <b>ʊ</b>	4	0	4	
42C	4	1	5	
42D	10	1	11	
42E	8	1	9	
71G	22	38	60	
76J	35	30	65	
91B	1,341	500	1,841	
91C	71	68	139	
91D	69	56	125	
91E	58	58	116	
91F	12	15	27	
91G	20	12	32	
91 <b>H</b>	4	13	17	
91J	8	. 3	11	
91L	1	6	7	
91 <b>M</b>	23	25	48	
91N	11	3	14	
91P	28	15	43	
910	39	26	65	
91R	22	23	45	
915	22	13	35	
91 <b>T</b>	11	16	27	
91 <b>U</b>	7	4	11	
91 <b>V</b>	9 2	4	13	
91 <b>W</b>	2	2	4	
91X	2	0	2	
91Y	11	8	19	
92B	68	77	145	
92E	2	2	4	
Signal	<u>3,944</u> (42.7)	<u>691</u> (30.6)	$\frac{4,635}{(40.4)}$	
29E	47	2	49	
29J	84	9	93	

Table C-1, Cont'd.

	Male Losses	Female Losses	All Losses
29M	1	0	1
29N	34	8	42
298	72	8	80
29V	49	4	53
29Y	37	0	37
31C	537	98	635
31D	400	75	475
31F	267	70	337
31K	396	23	419
31L	203	38	241
31M	246	46	292
31N	85	21	106
31U	402	11	413
31V	266	4	270
33R	6	0	6
33T	14	1	15
33V	3	0	3
33Y	18	1	19
36L	52	9	61
36 <b>M</b>	7	3	10
39C	29	0	29
39D	31	5	36
39E	32	8	40
39G	12	1	13
39L	1	0	1
98C	207	76	283
98D	24	7	31
98G	261	121	382
98H	46	19	65
98J	34	12	46
98K	41	11	52
2	<del></del>		-
Transportation	1,270	304	1,574
	(13.8)	(13.5)	(13.7)
0.0==			
88H	110	33	143
88K	33	5	38
88L	13	0	13
88M	1,073	244	1,317
88N	41	22	63
Military intelligence	410	105	<u>515</u>
and the state of t	$\frac{410}{(4.4)}$	$\frac{103}{(4.7)}$	$\frac{315}{(4.5)}$
96B	135	43	178
96D	21	13	34
96H	6	0	6
96R	94	0	94
2 O IX	<i>3</i> <b>T</b>	U	ノモ

Table C-l, Cont'd.

	Male Losses	Female Losses	All Losses
97B	74	18	92
97E	68	27	95
97G	12	4	16
<u>Chemical</u>	$\frac{339}{(3.7)}$	$\frac{30}{(1.3)}$	<u>369</u> (3.2)
54B	339	30	369
Aviation	$\frac{1,310}{(14.2)}$	$\frac{95}{(4.2)}$	1,405 (12.2)
67H	16	1	17
67N	137	6	143
67R	71	3	74
67 <b>S</b>	12	1	13
67 <b>T</b>	180	7	187
67U	104	3	107
67 <b>V</b>	141	6	147
67Y	85	1	86
68B	31	3	34
68D	51	1	52
68F	33	1	34
68G	51	3	54
68H	10	0	10
68J	53	1	54
68L	15	1	16
68N	22	4	26
68Q	12	1	13
68R	13	5	18
68X	47	3	50
93B	77	0	77
93C	88	17	105
93D	7	0	7
93P	54	27	<u>81</u>
TOTAL	9,226 (100.0)	2,257 (100.0)	11,483 (100.0)

PMOS 3-digit code.

Reserve available includes those losses transferring to the Reserve Components and other losses eligible for reserve service.

<sup>&</sup>lt;sup>c</sup>See text chapter 4 for discussion of priority occupations.

<sup>&</sup>lt;sup>d</sup>Percent for occupational groups in parentheses.

# **APPENDIX D**

TABLE D-1 SOURCE OF ARMY SELECTED RESERVE ACCESSIONS BY GENDER AND PAYGRADE AT ACCESSION, JANUARY-JUNE 1994 (Percent)

	PAYGRADE		
Source	E1-E3	E4-E9	All
		( 10 000)	( 04 050)
Male Accessions	(n=12,751)	(n=12,209)	(n=24,960)
Nonprior Service	70.8	1.9	37.1
Prior Service		01 5	11 0
From Active Army (direct)	0.9	21.5 12.2	11.0
From Civil Life (Reserve Eligible)	4.8		8.4
From Other Service (Active or Res.)	0.1	0.4	0.3
From IRR, Standby, or Retired	23.4	64.0	43.2
Total	100.0	100.0	100.0
Female Accessions	(n=4,307)	(n=2,732)	(n=7,039)
Nonprior Service	76.9	4.8	48.9
Prior Service			
From Active Army (direct)	0.7	20.3	8.3
From Civil Life (Reserve Eligible)	3.3	10.2	6.0
From Other Service (Active or Res.)	0.1	0.7	0.4
From IRR, Standby, or Retired	19.0	64.0	36.4
Total	100.0	100.0	100.0
All Accessions	(n=17,058)	(n=14,941)	(n=31,999)
Nonprior Service	72.3	2.4	39.7
Prior Service			
From Active Army (direct)	0.9	21.3	10.4
From Civil Life (Reserve Eligible)	4.4	11.9	7.9
From Other Service (Active or Res.)	0.1	0.4	0.3
From IRR, Standby, or Retired	22.3	64.0	41.7
Total	100.0	100.0	100.0
(Missing = 2)			

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